

SEQUENCE LISTINGS

SEQ ID NO	CLONE NAME	SEQUENCE
SEQ ID NO: 1	405 (pumilus)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTGCGTCA CAGTATGGGTGGCGCGAACACACCTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCGTTC GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGCTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGGCCAAAATACGAATTAA
SEQ ID NO: 2	406 (subtilis)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGTATGCTGTCTGTTACATCGC TGTTTGCGTTGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTTTGGGACAA GACAGGCACAAATTATAACAATGGACCGGTAT TACCACGATTTGTGCAAAAGGTTTTAGATGAA ACGGGTGCGAAAAAAGTGGATATTGTGCGTCA CAGCATGGGGGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAGTTGCA AACGTCGTGACGCTTGGCGGCGCGAACCGTTT GACGACAGGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATAAATTACTT ATCAAGATTAGATGGTGCTAGAAACGTTCAAA TCCATGGCGTTGGACACATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTGAACGGCGGGGGACTCAATACAAATTAG
SEQ ID NO: 3	402 (megaterium)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GACACAATCCAGTTGTTATGGTTCACGGTAT

		CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTGTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGGCCACAATACAAATTAA
SEQ ID NO: 4	400 (lentus)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTTCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTGTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGAGGACTAAATACAAATTAA
SEQ ID NO: 5	396 (circulans)	ATGAAATTTATAAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTTCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTGTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA

		TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGCCTCAATACAAATTAA
SEQ ID NO: 6	392 (azotoformans)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCGAGCTGTATGCGGTTGATTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTATAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTCTGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCAATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTACAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGCCTAGATACAAATTAA
SEQ ID NO: 7	398 (firmus)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTATAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTCTGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTACAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG

		AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGAGGCCACAATACAAATTAA
SEQ ID NO: 8	393 (badius)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTGCGTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGAGGCCACAATACAAATTAA
SEQ ID NO: 9	Dc5h	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGTATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCAGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCAAGGACAA GACAGGCACAAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGATGAA ACGGGTGCGAAAAAAGTGGATATTGTGCGTCA CAGCATGGGGGGCGCGAACACACTTTACTACA TAAAAATCTGGACGGCGGAAATAAAGTTGAA AACGTCGTGACGCTTGGCGGCGCCAACCGTTT GACGACAGGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTATTT ATCAAGATTAGATGGTGCGAGAAACGTTCAAA TCCATGGCGTTGGACACATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTGAACGGCGGGGGCCTCAATACAAATTAA
SEQ ID NO: 10	Dc5f	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGTATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCAGGAATTA

		AGAGCTACCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCTAAGACAA AACAGGGAATAACCGCAACAATGGTCCGCGTC TATCGAGATTTCGTCAAAGATGTGTTAGACAAA ACGGGTGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGTGGAGCGAACACGCTATACTATA TCAAGAATCTAGATGGCGGCGATAAAATTGAG AACGTTGTCACAATTGGTGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAATTCTTTACACATCCGTCTAT AGCTCAGCAGATCTTATTGTCGTCAACAGCCT CTCTCGTTTAATTGGCGCAAGAAACATCCTGA TCCATGGCGTTGGTCATATCGGTCTATTAACC TCAAGCCAAGTGAAAGGGTATATTAAAGAAGG ACTGAACGGCGGAGGCCTCAATACAAATTAA
SEQ ID NO: 11	Dc5c1	ATGAAAGTGATTTTGTGTTAAGAAAAGGAGTTT GCAAATTCTTGTTGCCCTTGCCCTTAGTGCTAG GTTCAATAGCCTTCATCCAGCCGAAAGAAGCC AAAGCGGCTGAGCATAATCCGGTTGTAATGGT GCATGGCATGGGTGGTGCCTCTTATAACTTTG CTTCGATCAAACGATACTTAGTATCACAGGGA TGGGATCAAACCAACTTTTGTCAATCGATTT CATAGACAAAACAGGCAATAACCTAAACAATG GCCCCAGGCTCTCGAGATTTCGTGAAAGACGTA CTAGCCAAAACGGGCGCCAAAAAAGTAGATAT TGTGGCTCATAGTATGGGCGGTGCGAACACGT TATACTATATTAAAAACCTAGACGGTGGAGAT AAAATTGAAAACGTCGTCACATTAGGTGGAGC AAACGGACTCGTATCACTCAGAGCATTACCAG GCACCGATCCAAATCAAAAAATTCTTTACACA TCTGTCTATAGCTCAGCCGATCTCATTGTCGT CAACAGCCTTTTCGCGTTTAATTGGCGCAAGAA ACGTCCTGATCCACGGCGTTGGACATATCGGT CTATTAACCTCAAGCCAAGTCAAAGGCTATGT GAAAGAAGGATTGAATGGCGGGGGACAGAATA CAAATTAA
SEQ ID NO: 12	Dc5a2	ATGAAAGTGATTTTGTGTTAAGAAAAGGAGTTT GCAAATTCTTGTTGTGCTTGCAATTGGTGATGG GTTCAATGGCCTTCATCCAGCCAAAAGAGATC AGAGCGGCTGAGCATAATCCGGTTGTGATGGT ACATGGCATGGGCGGTGCGTCTTATAACTTTG CTTCGATTAAAAGTTACTTGGTATCACAAGGA TGGGATCGAAACCAATTATTTGCTATCGATTT CATAGACAAAACAGGTAATAACCGCAACAATG GTCCGCGTCTATCCAGATTTCGTCAAAGATGTG CTAGCCAAAACAGGTGCCAAAAAAGTTGATAT TGTGGCTCATAGTATGGGCGGAGCGAACACGT

		TATACTATATTAAGAATCTAGACGGCGGCGAT AAAATAGAAAACGTTGTTACACTTGGTGGAGC GAACGGACTCGTTTCACTCAGAGCATTACCAG GCACCGATCCAAATCAAAAAATCCTTTACACA TCCGTCTACAGCTCAGCCGATCTTATCGTCGT CAACAGCCTCTCGCGTTTAATTGGCGCAAGAA ACGTCTTCATTACGGCGTTGGTCACATCGGT CTATTAGCTTCAAGCCAAGTCAAAGGCTATAT CAAAGAAGGACTGAATGGCGGAGGCCAAAATA CAAATTAA
SEQ ID NO: 13	Dc512	ATGAAAGTGATTTTTGTTAAGAAAAGGAGTTT GCAAATTCTCATTGCGCTTGCAATTGGTGATTG GTTCAATGGCGTTTATCCAGCCGAAAGAGGCG AAGGCGGCTGAGCATAATCCGGTTGTGATGGT GCATGGCATTGGCGGTGCCTCTTATAACTTTT TTTCTATTAAAAGTTATTTGGCCACACAAGGC TGGGATCGAAACCAATTATATGCTATTGATTT CATAGACAAAACAGGAAATAACCGCAACAATG GTCCGCGTCTATCGAGATTCGTCAAAGATGTG TTAGACAAAACGGGTGCCAAAAAAGTAGATAT TGTGGCTCATAGTATGGGTGGAGCGAACACGC TATACTATATCAAGAATCTAGATGGCGGCGAT AAAATTGAGAACGTTGTCACAATTGGTGGAGC AAACGGACTCGTTTCAAGCAGAGCATTACCAG GCACAGATCCAAATCAAAAAATTCTTTACACA TCCGTCTATAGCTCAGCAGATCTTATTGTCTGT CAACAGCCTCTCTCAGTTTAATTGGCGCAAGA AACATCCTGATCCAGGCGTTGGTCATATCGGT CTATTAACCTCAAGCCAAGTGAAAGGGTATAT TAAAGAAGGACTGAACGGCGGAGGCCTCAATA CAAATTAA
SEQ ID NO: 14	Sga	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTTCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTTCGCGGAATTA AGAGCTATCTCGTATCTCAAGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTTCAGGGACAA GACAGGCAATAACTTAAACAACGGTCCAGTAT TATCGCGTTTTCGTGAAAAAGGTATTAGATGAA ACCGGTGCGAAAAAAGTGGATATTGTCTGCTCA CAGCATGGGCGGCGCTAACACGCTTTACTACA TAAAAAATTTGGATGGCGGTAATAAAATTGAA AACGTCGTAAACACTTGGCGGCGCGAATCGTCT TGTGACAGGCAAGGCGCTTCCGGGTACTGATC CCAACCAAAAGATCTTGTACACATCCGTTTAC AGTAGTGCTGATATGATTGTTATGAATTACTT

		AACAAAATTAGACGGGGCTAAAAATGTTCAAA TTCATGGTGTCTGGACATATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTTAACGGCGGAGGCCTCAATACAAATTAA
SEQ ID NO: 15	Sgc	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCTGGGATAA GACAGGCAATAACTTAAACAACGGTCCAGTAT TATCGCGTTTTTGTGAAAAAGGTATTAGATGAA ACCGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGCATGGGCGGCGCTAACACGCTTTACTACA TAAAAAATTTGGATGGCGGTAATAAAATTGAA AACGTCGTAACACTTGGCGGCGCGAATCGTCT TGTGACAGGCAAGGCGCTTCCGGGTACTGATC CCAACCAAAAGATATTGTACACATCCGTTTAC AGTAGTGCTGATATGATTGTTATGAATTACTT ATCAAAATTAGACGGGGCTAAAAATGTTCAAA TTCATGGTGTCTGGACATATCGGCCTTCTGTAC AGCAGCCAAGTCAATAGCCTGATTAAAGAAGG GCTTAACGGCGGAGGACTCAATACGAATTAA
SEQ ID NO: 16	Sgd	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTTAGTGACAA AACAGGCAATAACTTAAACAACGGTCCAGTAT TATCGCGTTTTTGTGAAAAAGGTATTAGATGAA ACCGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGCATGGGCGGCGCTAACACGCTTTACTACA TAAAAAATTTGGATGGCGGTAATAAAATTGAA AACGTCGTAACACTTGGCGGCGCGAATCGTCT TGTAACAGGCAAGGCGCTTCCGGGTACTGATC CCAACCAAAAGATCTTGTACACATCCGTTTAC AGTAGTGCTGATATGATTGTTATGAATTACTT ATCAAAATTAGACGGGGCTAAAAATGTTCAAA TTCATGGTGTCTGGACATATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTTAACGGCGGGGGCCTGAATACGAATTAA
SEQ ID NO: 17	Sgf	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT

		GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGC GGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCAAAGACAA GACAGGGAATAACCGCAACAATGGTCCGCGTC TATCGAGATTTCGTCAAAGATGTGTTAGACAAA ACAGGAGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGCGGAGCGAACACATTATACTATA TTAAGAATCTAGATGGTGGCGATAAAATTGAG AACGTTGTCACAATTGGTGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAATTCTTTACACATCCGTCTAT AGCTCAGCAGATCTTATTGTTCGTCAACAGTCT CTCTCGTTTAATTGGCGCAAGAAACGTCCAAA TCCATGGCGTTGGACATATCGGTCTATTAACC TCAAGCCAAGTCAAAGGATATATTAAAGAAGG ACTGAACGGCGGGGGCCTCAATACAAATTAA
SEQ ID NO: 18	Sgh	ATGAAATTTGTAAAAAGAAGGATCCTTGC ACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGC GTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGC GGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCAATTGACAA GACAGGAAATAACCGCAACAATGGTCCGCGTC TATCGAGATTTCGTCAAAGATGTGTTAGACAAA ACAGGAGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGCGGAGCGAACACATTATACTATA TTAAGAATCTAGATGGTGGCGATAAAATTGAG AACGTTGTCACAATTGGTGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAATTCTTTACACATCCGTCTAT AGCTCAGCAGATCTTATTGTTCGTCAACAGTCT CTCTCGTTTAATTGGCGCAAGAAACGTCCAAA TCCATGGCGTTGGACATATCGGTCTATTAACC TCAAGCCTAGTCAAAGGATATATTAAAGAAGG ACTGAACGGCGGAGGCCAAAATACAAATTAA
SEQ ID NO: 19	Mt2b1	ATGAAAGTGATTTTGTTAAGAAAAGGAGTTT GCAAATTCCTTGTGTCCTTGCCTTAGTGATAG GTTCAATGGCCTTCATCCAGCCAAAAGAAATC AAAGCAGCTGAGCACAATCCGTTGTGATGGT ACATGGTATTGGAGGAGCGTCTTATAACTTTG CTTCGATTAAAAGTTATTTGGTTAACCAAGGC TGGGATCGAAACCAATTATTTGCTATCGATTT CATAGACAAAACAGGGAATAACCGCAACAATG GTCCTCGTTTATCTAGATTTCGTCAAAGATGTG CTAGACAAAACGGGTGCCAAAAAAGTAGATAT

		TGTGGCGCATAGTATGGGCGGGGCGAACACGC TATACTATATTAAGAATCTAGATGGCGGCGAT AAAATTGAAAACGTCGTCACCATTGGTGGAGC AAACGGACTCGTTTCACTCAGAGCATTACCAG GAACAGATCCAAATCAAAAAATTCTCTATACA TCTGTCTATAGCTCAGCCGATTTGATTGTCTGT CAACAGCCTTTCGCGTTTAACTGGCGCAAGAA ATGTCCTGATCCACGGCGTTGGCCATATCGGT CTATTAACCTCAAGCCAAGTGAAAGGGTATAT TAAAGAAGGACTGAACGGCGGGGGCCTAAATA CAAATTAA
SEQ ID NO: 20	H2a	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTACAGGGACAA GACAGGAAATAACCGCAACAATGGTCCGCGTC TATCTAAATTCGTCAAAGATGTGTTAGACAAA ACGGGTGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGCGGGGCGAACACGCTATACTATA TTAAGAATCTAGATGGCGGCGATAAAATTGAG AACGTTGTCACAATTGGCGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAATTCTTTACACATCCGTCTAC AAGCTCAGCCGATCTCATTGTCGTCAACAGTC TCTCTCGTTTAATTGGCTGCAAGAAACAGTCC AAATCCATGGCGTTGGACATATCGGTCTATTA ACCTCAAGCCAAGTCAAAGGATATATTAAAGA AGGACTGAACGGCGGGGGACTAAATACAAATT AA
SEQ ID NO: 21	lf15(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGGCAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGTA TTATCGCGTTTTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAAGTGATATTGTCTGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTAACGCTTGGCGGCACGAACCGTT CGACGACAAGCAAGGCGCTTCCGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT

		GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 22	3C12	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCTAGATTTCGTCAAAGATGTGCTAGACAA AACGGGTGCGAAAAAAGTGGATATTGTGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 23	3N19(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGAAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGACATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CGGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATCCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTGAATACAAATTGA
SEQ ID NO: 24	G2.2	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTATAGACGA AACGGGTGCGAAAAAAGTGGATATTGTGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT

		CCAAATCAAAGATTTTATACACATCCATTTA CGGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTACAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 25	2C3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGGTA TTATCACGATTTGTGCAAAAGGTTTATAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCGAACACACTTTACTAC ATAAAAAATTTGGATGGCGGTAATAAAATTGA AAACGTCGTCACCATTTGGTGGAGCAAACGGAC TCGTTTCAAGCAGAGCATTACCAGGCACAGAT CCAAATCAAAAAATTCCTTACACATCCGTCTA TAGCTCAGCAGATCTTATTGTCGTCAACAGTC TCTCTCGTTTAATTGGCGCAAGAAACGTCCAA ATCCATGGCGTTGGACATATCGGTCTATTAAC CTCAAGCCAAGTCAAAGGATATATTAAAGAAG GGCTTAACGGCGGGGGCCACAATACGAATTGA
SEQ ID NO: 26	2F11	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGAGCTTCATACAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGGTA TTATCACGATTTGTGCAAAAGGTTTATAGACGA AACCAGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAGGGCGCTTCCGGGAACAGAT CCAAATCAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTACAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAAAGGATATATTAAAGAAG GACTGAACGGCGGAGGCCTAAATACGAATTGA
SEQ ID NO: 27	KV11(6C7)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTAGTTTTCGCGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATCCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGGTA TTATCACGATTTGTGCAAAAGGTTTGGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC

		GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACATGAT CCCAACCAAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTTATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTTCATGGCGTTGGGCACACTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCACAATACAAATTGA
SEQ ID NO: 31	KV5(2H6)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGAGCATCATACAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATACGGTTGATTTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAATCGTC TTGTAACAGGCAAGGCGCTTCCGGGAACAGAT CCCAATCAAAAGATTTTGTACGCATCCGTTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCTGAATACAAATTGA
SEQ ID NO: 32	3E5	TGAACACAATCCAGTCGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTTAGATGA AACCGGTGCGAAAAAGTGGACATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATCCATGGCGTTGGACACATCGGCCTTCTGTA CAGCAGCCAAGTCAACAGCCTGATTAAAGAAG

		GACTGAACGGCGGGGGCCTCAATACGAATTGA
SEQ ID NO: 33	G2.1	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGCGGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACCGGTGCGAAAAAAGTGGACATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCACGAACCGTT TGACGACAAGCAGGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAACTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 34	3H24(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCCGTATGCGGTTGATTTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTTAGACAA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 35	KV10(4G6)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTGTCTCAGGGCTGGCCGCG GGACAAGCTGTATGCAGTTGATTTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACCGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAGCGTCGTAACACTTGGCGGCGCGAATCGTC TTGTAACAGGCAAGGCGCTTCCGGGAACATGAT CCCAACCAAAAGATTTTATACACATCCATTTA

		CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTCGGACATATCGGCCTTCTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCACAATACAAATTGA
SEQ ID NO: 36	KV12(6D4)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTAGTTTTCGGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGCCGCG GGACAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCCC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTGACGCTTGGCGGCGCCAACCGTT TGACGACAGGCAAGGCGCTTCCGGGTACTGAT CCCAATCAAAAGATTTTATACACATCCGTTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGGCTGATTAAAGAAG GACTGAACGGCGGAGGCCACAATACAAATTGA
SEQ ID NO: 37	N2.2	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTAGTTTTCGGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGCCGCG GGACAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCCT ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTGACGCTTGGCGGCGCCAACCGTT TGACGACAGGCAAGGCGCTTCCGGGTACTGAT CCCAATCAAAAGATTTTATACACATCCGTTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGGCTGATTAAAGAAG GACTGAACGGCGGAGGCCACAATACAAATTGA
SEQ ID NO: 38	N2.3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGGGGGGCATCATTAGTTTTCGGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGCCGCG GGACAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCCC ACAGCATGGGTGGCGCGAACACACTTTACTAC

		AAACAGGCACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGATGGCGGTAATAAAATTGA AAACGTCGTAACACTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAAAGATCTTGTACACATCCATTTA CAGCAGTGCCGATATGGTTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGTGTGCGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCACAATACGAATTGA
SEQ ID NO: 42	7D6	TAAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATACAATTTTGCGGGAATA AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCAGTTGATTTTAGTGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGTAATAAAATTGA AAACGTCGTAACACTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAACTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGATTAAATACGAATTGA
SEQ ID NO: 43	3F3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGAATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTGGGACA AGACCGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGCTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATCCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCAGAATACGAATTGA

SEQ ID NO: 44	2D11(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGAAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTGCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTCACACTTGGCGGCGCGAACC GTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGCCAGAATACGAATTGA
SEQ ID NO: 45	3C23(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGGCAAGCTGTATGCGGTTGATTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTATAGACGA AACGGGTGCGAAAAAAGTGGATATTGTGCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTCACACTTGGCGGCGCGAACC GTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTTAACGGCGGGGGCCACAATACGAATTGA
SEQ ID NO: 46	G2.3	TGAACACAATCCAGTCGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATA AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCCGTA TTATCACGATTTGTGCAAAAGGTTTATAGACGA AACGGGTGCGAAAAAAGTGGATATTGTGCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAGAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACC GTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTGCT

		TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCAGAATACGAATTGA
SEQ ID NO: 47	2A3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCGTTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCAGTTGATTTCAAAGACA AGACAGGGACGAATTATAACAATGGCCCCGGTA TTATCACGATTTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAGAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACC GTT CGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTTATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGAGGCCATAAATACAAATTGA
SEQ ID NO: 48	2F4	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCCGGTA TTATCACGATTTTGTGAAAAAGGTATTAGATGA AACC GGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGCGATAAAATTGA GAACGTCGTAACACTTGGCGGCGCGAACC GTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGCCAGAATACGAATTGA
SEQ ID NO: 49	2B9(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCAGTTGATTTTGGGGCA AGACAGGGACGAATTATAACAATGGCCCCGGTA TTATCGCGTTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA

		AAACGTCGTAACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGAGGCCAAAATACGAATTGA
SEQ ID NO: 50	2C5	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCAGTTGATTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCGCGTTTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGATGGCGGTAATAAAATTGA AAACGTCGTCACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACGTAT CCCAACCAAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGAGGCCAAAATACGAATTGA
SEQ ID NO: 51	KV1(2A6)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTCAAGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGAAAAAGGTATTAGATGA AACCAGGTGCGAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTTAACGGCGGGGGCCAGAATACGAATTGA
SEQ ID NO: 52	2D13(G2)	TAAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACGAGCTGTATGCGGTTGATTTTGGGACG AGACAGGGACGAATTATAACAATGGCCCGGTA

		TTATCACGATTTGTGCAAAAAGGTTTTAGACGA AACCGGTGCGAAAAAAGTGGATATTGTGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGTACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAATGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGCCAAAATACGAATTGA
SEQ ID NO: 53	3C8	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAAGGTTTTAGACGA AACCGGTGCGAAAAAAGTGGATATTGTGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTAACACTTGGCGGCGCGAATCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCAAAATACAAATTGA
SEQ ID NO: 54	2D5	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAAGGTTTTAGACGA AACCGGTGCGAAAAAAGTGGATATTGTGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAATGTTCAA ATTTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGACAAAATACAAATTGA

SEQ ID NO: 55	405 (pumilus)	MKFVKRRIIALVTILVLSVTSLSFAMQPSAKAA EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTPYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNAQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 56	406 (subtilis)	MKFVKRRIIALVTILMLSVTSLSFALQPSAKAA EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLPFRVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVA NVVTLGGANRLTTGKALPGTDPNQKILYTSIY SSADMIVINYLSRLDGARNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 57	402 (megaterium)	MKFVKRRIIALVTILVLSVTSLSFAMQPSAKAA DTIQLLWFTGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 58	400 (lentus)	MKFVKRRIIALVTILVLSVTSLSFAMQPSAKAA EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 59	396 (circulans)	MKFVKRRIIALVTILVLSVTSLSFAMQPSAKAA EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 60	392 (azotoformans)	MKFVKRRIIALVTILVLSVTSLSFAMQPSAKAA EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GELYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSANMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGLDTN
SEQ ID NO: 61	398 (firmus)	MKFVKRRIIALVTILVLSVTSLSFAMQPSAKAA EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY

		SSADMIVMNYLSKLDGAKNAQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 62	393 (badius)	MKFVKRRIIALVTILVLSVTSLFAMQPSAKAA EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 63	Dc5h	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFDKDTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSIY SSADMIVMNYLSRLDGARNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 64	Dc5f	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFXDKTGNNRNNGPRLSRFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNVLIHGVBHIGLLT SSQVKGYIKEGLNGGGLNTN
SEQ ID NO: 65	Dc5c1	MKVIFVKKRSLQILVALALVLGSIQFIQPKA KAAEHNPPVVMVHGMGGASYNFASIKRYLVSQG WDQNQLFAIDFIDKTGNNLNNGPRLSRFVKDV LAKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTLGGANGLVSLRALPGTDPNQKILYT SVYSSADLIVVNSLSRLIGARNVLIHGVBHIG LLTSSQVKGYIKEGLNGGGQNTN
SEQ ID NO: 66	Dc5a2	MKVIFVKKRSLQILVVLALVMGSMFIQPKAI RAAEHNPPVVMVHGMGGASYNFASIKSYLVSQG WDRNQLFAIDFIDKTGNNRNNGPRLSRFVKDV LAKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTLGGANGLVSLRALPGTDPNQKILYT SVYSSADLIVVNSLSRLIGARNVLIHGVBHIG LLASSQVKGYIKEGLNGGGQNTN
SEQ ID NO: 67	Dc512	MKVIFVKKRSLQILIALALVIGSMFIQPKA KAAEHNPPVVMVHGIGGASYNFFSIKSYLATQG WDRNQLYAIDFIDKTGNNRNNGPRLSRFVKDV LDKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTLGGANGLVSSRALPGTDPNQKILYT SVYSSADLIVVNSLSQFNWRKKHPDPGVGHIG LLTSSQVKGYIKEGLNGGGGLNTN
SEQ ID NO: 68	Sga	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFRDKTGNNLNNGPVLSRFVKKVLDE

		TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYTSVY SSADMIVMNYLTKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 69	Sgc	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGNNLNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 70	Sgd	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFSDKTGNNLNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 71	Sgf	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFKDKTGNNRNNGPRLSRFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNVQIHGVGHIGLLT SSQVKGYIKEGLNGGGLNTN
SEQ ID NO: 72	Sgh	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFIDKTGNNRNNGPRLSRFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNVQIHGVGHIGLLT SSLVKGYIKEGLNGGGLNTN
SEQ ID NO: 73	Mt2b1	MKVIFVKRSLQILVALALVIGSMAFIQPKIE KAAEHNPFVVMVHGIGGASYNFASIKSYLVNQG WDRNQLFAIDFIDKTGNNRNNGPRLSRFVKDV LDKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTIGGANGLVSLRALPGTDPNQKILYT SVYSSADLIVVNSLSRLTGARNVLIHGVGHIG LLTSSQVKGYIKEGLNGGGLNTN
SEQ ID NO: 74	H2a	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFRDKTGNNRNNGPRLSKFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY KLSRSHCRQQSLSFNWLQETVQIHGVGHIGLL TSSQVKGYIKEGLNGGGLNTN

SEQ ID NO: 75	1f15(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGTNRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 76	3C12	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 77	3N19(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY GSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 78	G2.2	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY GSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 79	2C3	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTIGGANLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNVQIHGVGHIGLLT SSQVKGYIKEGLNGGGHNTN
SEQ ID NO: 80	2F11	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSRALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVKGYIKEGLNGGGLNTN
SEQ ID NO: 81	KV11(6C7)	EHNPVVMVHGIGGASFSFAGIKSYLVSQGWSR GKLYPVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 82	KV6(3A1)	EHNPVVMVHGIGGASFSFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM

		NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 83	KV2(2D1)	EHNPPVVMVHGIGGASYSFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 84	N2.5	EHNPPVVMVHGIGGASYSFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHTGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 85	KV5(2H6)	EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYTVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYASVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 86	3E5	EHNPPVVMVHGIGGASFNFAGIRSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 87	G2.1	EHNPPVVMVHGIGGASFNFAGIRSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGTNRLTTSRALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 88	3H24(G2)	EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 89	KV10(4G6)	EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE SVVTLGGANRLVTGKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 90	KV12(6D4)	EHNPPVVMVHGIGGASFNFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSVY

		SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 91	N2.2	EHNPVVMVHGIGGASFSFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAYSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 92	N2.3	EHNPVVMVHGIGGASFSFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVG NVVTLGGANRLTTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 93	N2.1	EHNPVVMVHGIGGASFSFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 94	KV4(2E12)	EHNPVVMVHGIGGTSFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 95	KV9(4C6)	EHNPVVMVHGIGGASFSFAGIKSYLVSQGWSR DKLYAVDFSDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 96	7D6	KHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR DKLYAVDFSDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 97	3F3	EHNPVVMVHGIGGASFNFAGIKSYLESQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKALDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 98	2D11(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE

		NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 99	3C23(G2)	EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGHNTN
SEQ ID NO: 100	G2.3	EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNCLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 101	2A3	EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFKDKTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGLNTN
SEQ ID NO: 102	2F4	EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 103	2B9(G2)	EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWGKTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 104	2C5	EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 105	KV1(2A6)	EHNPFVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFKDKTGTNYNNGPVLRSFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 106	2D13(G2)	KHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DELYAVDFWDETGTNYNNGPVLRSFVQKVLDE

		TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 107	3C8	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN
SEQ ID NO: 108	2D5	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNNGGGQNTN